

(Preliminary Subject to Change)



**Employees Retirement System** 

City of Philadelphia Employees Retirement System Executive Summary September 30, 2019 Total Fund Composite

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		5,382,476,222	-183,275,107	100.0	100.0	0
Total Fund w/o Alternative Assets		3,931,384,798	-157,202,654	73.0	69.0	217,476,205
Investment Grade Fixed Income Composite		698,634,391	-305	13.0	10.0	160,386,769
Brandywine Global Investment Management	Global Fixed Income	140,032,338	0	2.6		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	176,784,093	0	3.3		
Logan Circle	Core Plus Fixed Income	48,534,041	-305	0.9		
Longfellow	Core Plus Fixed Income	171,682,453	0	3.2		
Rhumbline Core Bond Index	Core Fixed Income	161,601,465	0	3.0		
Opportunistic Fixed Income Composite		254,808,678	-8,176,533	4.7	4.0	39,509,629
T - Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	9,388,559	-1,272,727	0.2		
T - Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	16,437,891	-3,024,635	0.3		
T - KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	45,795,202	-3,639,171	0.9		
Logan Circle - EMD	EM Fixed Income	75,350,623	-240,000	1.4		
Strategic Income Management	High Yield Fixed Income	53,056,659	0	1.0		
Lord Abbett High Yield	High Yield Fixed Income	54,346,124	0	1.0		
U.S. Equity Composite		1,639,624,370	-15,000,000	30.5	30.0	24,881,503
Rhumbline Russell 1000 Index	Large-Cap Core	1,197,197,885	-15,000,000	22.2		
O'Shaughnessy Asset Management	Large-Cap Value	29,482,136	0	0.5		
Rhumbline MidCap Index	Mid-Cap Core	157,624,793	-6,252	2.9		
Rhumbline Russell 2000 Index	Small-Cap Core	40,597,354	-1,664	0.8		
Emerald Advisors	Small-Cap Growth	77,228,519	0	1.4		
T- Fisher Asset Management	Small-Cap Value	56,054,503	0	1.0		
Fiera Capital	Smid-Cap Growth	27,549,168	0	0.5		
Ariel	Smid-Cap Value	53,778,404	0	1.0		
Non-U.S. Equity Developed Composite		1,085,752,400	-10,000,000	20.2	21.0	-44,567,607
Causeway Capital Management	Non-U.S. Large-Cap Core	107,944,404	0	2.0		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	782,671,636	-10,000,000	14.5		
Northern Trust International Small Cap	Non-U.S. Small-Cap Core	99,935,267	0	1.9		
Strategic Global Advisors	Non-U.S. Small-Cap Core	31,155,963	0	0.6		
Mackenzie Investments	Non-U.S. Small-Cap Core	60,196,753	0	1.1		
Non-U.S. Equity Emerging Composite		211,611,947	0	3.9	4.0	-3,687,102
Rhumbline Emerging Markets Index	Emerging Markets	211,607,785	0	3.9		

#### Market Value: \$5,382.5 Million and 100.0% of Fund

Total Fund Composite

Market Value: \$5,382.5 Million and 100.0% of Fund

		LIIU	ing September			
	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Cash Composite		40,953,013	-124,025,816	0.8	0.0	40,953,013
Cash	Cash & Equivalents	40,288,122	-124,023,466	0.7		
Directed Commissions	Cash & Equivalents	664,890	-2,350	0.0		
Absolute Return		28,641,120	0	0.5	0.0	28,641,120
Elizabeth Park Capital Management	Long/Short Hedge Fund	26,843,559	0	0.5		
T - Archview Offshore Fund. LTD	Credit Hedge Fund	1,797,561	0	0.0		
Real Assets Composite		985,503,408	-16,454,202	18.3	19.0	-37,167,074
Real Assets - Public Real Estate Composite		61,363,348	-5,000,000	1.1	1.0	7,538,586
Rhumbline FTSE NAREIT	Real Assets	61,363,348	-5,000,000	1.1		
Real Assets - Open-End Real Estate Composite		539,358,071	-4,707,064	10.0	11.0	-52,714,314
UBS Trumbull Fund	Core Real Estate	399,779,588	-4,423,550	7.4		
Clarion Lion Properties Fund	Core Real Estate	139,578,483	-283,514	2.6		
Real Assets - Infrastructure Composite		277,976,904	0	5.2	5.0	8,853,093
Rhumbline Infrastructure Index	Publicly-Traded Infrastructure	186,338,249	0	3.5		
Rreef Global Infrastructure	Global Infrastructure	91,638,655	0	1.7		
Real Assets - Private Real Estate Composite		89,623,314	-10,871,794	1.7	2.0	-18,026,211
Real Assets - Private Energy/Infrastructure Composite		17,181,772	4,124,656	0.3		17,181,772
Private Assets Composite		436,946,896	-9,618,251	8.1	12.0	-208,950,251
Private Assets - Private Equity	U.S. Private Equity FoF	410,829,286	-6,478,409	7.6		
Private Assets - Private Debt	Mezz. Private Equity	26,117,609	-3,139,842	0.5		

### Annualized Performance (Net of Fees)

Market Value: \$5,382.5 Million and 100.0% of Fund

#### Ending September 30, 2019

							3		,				
	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	1.3%	0.3%	11.4%	0.3%	2.9%	5.4%	7.8%	7.7%	5.2%	6.7%	7.4%	7.4%	Jul-88
Total Fund Policy Benchmark	1.2%	0.3%	11.6%	0.3%	3.8%	6.1%	7.9%	8.3%	6.0%	7.4%	8.4%	8.3%	Jul-88
Total Fund w/o Alternative Assets	1.5%	0.0%	13.2%	0.0%	1.6%	4.2%	7.4%	7.8%	4.8%			5.3%	Jan-14
Investment Grade Fixed Income Composite	-0.4%	1.3%	7.2%	1.3%	8.1%	3.3%	2.7%	3.7%	2.5%	2.3%	3.7%	6.1%	Jul-88
Fixed Income Custom Benchmark	-0.7%	1.9%	8.0%	1.9%	9.7%	4.1%	2.7%	3.4%	3.3%	2.6%	3.7%	6.2%	Jul-88
Brandywine Global Investment Management	-0.1%	-1.7%	4.8%	-1.7%	3.5%	0.0%	1.9%	4.0%	1.7%	1.9%	4.7%	6.4%	Jan-09
FTSE WGBI TR	-1.3%	0.8%	6.3%	0.8%	8.1%	3.2%	1.2%	3.3%	1.8%	0.6%	1.7%	2.4%	Jan-09
Garcia Hamilton & Associates	-0.3%	1.5%	5.9%	1.5%	7.4%	3.6%	2.5%	2.9%	3.0%	2.9%	4.0%	5.2%	Aug-00
BBgBarc US Govt/Credit Int TR	-0.4%	1.4%	6.4%	1.4%	8.2%	3.5%	2.4%	2.7%	2.7%	2.1%	3.0%	4.4%	Aug-00
Logan Circle	-0.5%	2.6%	9.7%	2.6%	10.5%	4.9%	3.8%	4.4%	3.9%			3.8%	Oct-14
BBgBarc US Aggregate TR	-0.5%	2.3%	8.5%	2.3%	10.3%	4.4%	2.9%	3.5%	3.4%	2.7%	3.7%	3.2%	Oct-14
Longfellow	-0.6%	2.3%	8.7%	2.3%	10.2%	4.6%	3.4%	3.8%	3.6%			3.6%	Sep-14
BBgBarc US Aggregate TR	-0.5%	2.3%	8.5%	2.3%	10.3%	4.4%	2.9%	3.5%	3.4%	2.7%	3.7%	3.4%	Sep-14
Rhumbline Core Bond Index	-0.5%	2.4%	8.3%	2.4%	10.1%	4.3%	2.8%	3.3%	3.1%	2.4%	3.6%	4.2%	Jun-07
BBgBarc US Aggregate TR	-0.5%	2.3%	8.5%	2.3%	10.3%	4.4%	2.9%	3.5%	3.4%	2.7%	3.7%	4.4%	Jun-07
Opportunistic Fixed Income Composite	0.6%	0.1%	6.2%	0.1%	2.1%	1.8%	3.4%	3.7%	2.1%			3.2%	Dec-12
Opportunistic FI Custom Benchmark	0.2%	1.2%	9.8%	1.2%	5.5%	4.8%	5.5%	6.4%	4.8%	5.1%		4.9%	Dec-12
T - Apollo Franklin Partnership, L.P.	0.0%	0.4%	8.7%	0.4%	-1.8%	3.4%	0.6%	-0.7%	-4.1%			-2.2%	May-13
50% BarCap HY / 50% CSFB Lev Loans	0.4%	1.1%	8.9%	1.1%	4.7%	4.5%	5.4%	6.3%	4.8%	5.1%	6.7%	4.7%	May-13
T - Avenue Coppers Opportunity Fund LP	0.0%	0.5%	-0.4%	0.5%	-9.8%	-5.1%	-1.7%	-1.2%	-0.8%			0.6%	Dec-13
Actuarial Rate	0.6%	1.8%	5.7%	1.8%	7.6%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Dec-13
T - KKR-PBPR Capital Partners LP	0.0%	0.2%	-2.0%	0.2%	-6.2%	-1.7%	1.0%	2.8%	1.6%	4.1%		4.4%	Jun-12
Actuarial Rate	0.6%	1.8%	5.7%	1.8%	7.6%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-12
Logan Circle - EMD	1.1%	-1.5%	9.3%	-1.5%	7.9%	1.8%	4.4%	7.7%				5.3%	Feb-15
JP Morgan EMBI Global TR	-0.4%	1.3%	12.1%	1.3%	10.7%	3.7%	3.8%	6.9%	5.1%	4.1%	6.5%	5.6%	Feb-15
Strategic Income Management	0.8%	0.9%	8.4%	0.9%	4.7%	4.7%	6.1%					8.2%	Mar-16
ICE BofAML US High Yield TR	0.3%	1.3%	11.5%	1.3%	6.4%	4.6%	6.1%	7.7%	5.4%	5.9%	7.9%	8.6%	Mar-16

### Annualized Performance (Net of Fees)

Market Value: \$5,382.5 Million and 100.0% of Fund

#### Ending September 30, 2019

							5 - 1		,				
	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Lord Abbett High Yield	0.5%	1.5%		1.5%								8.1%	Jan-19
ICE BofAML US High Yield TR	0.3%	1.3%	11.5%	1.3%	6.4%	4.6%	6.1%	7.7%	5.4%	5.9%	7.9%	6.6%	Jan-19
U.S. Equity Composite	1.6%	0.4%	19.9%	0.4%	1.7%	9.2%	12.3%	12.3%	9.5%	12.1%	12.6%	9.6%	Jul-88
U.S. Equity Custom Benchmark	1.8%	0.6%	19.4%	0.6%	2.3%	9.7%	12.6%	13.2%	10.3%	12.9%	13.0%	10.3%	Jul-88
Rhumbline Russell 1000 Index	1.7%	1.4%	20.6%	1.4%	3.9%	10.6%	13.3%	13.7%	10.7%	13.2%	13.0%	8.0%	May-07
Rhumbline Russell 1000 Custom Benchmark	1.7%	1.4%	20.6%	1.4%	3.9%	10.6%	13.3%	13.7%	10.7%	13.3%			May-07
O'Shaughnessy Asset Management	4.7%	0.3%	18.5%	0.3%	-2.0%	6.9%	11.5%	11.0%	7.0%	12.4%		12.6%	Jun-12
Russell 1000 Value	3.6%	1.4%	17.8%	1.4%	4.0%	6.7%	9.4%	11.1%	7.8%	11.3%	11.5%	11.9%	Jun-12
Rhumbline MidCap Index	1.9%	0.4%	21.9%	0.4%	3.2%	8.5%						10.4%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	1.9%	0.5%	22.1%	0.5%	3.3%	8.6%						10.5%	Dec-16
Rhumbline Russell 2000 Index	2.1%	-2.3%	14.3%	-2.3%	-8.6%	2.7%						5.9%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	2.1%	-2.3%	14.2%	-2.3%	-8.8%	2.6%						5.8%	Dec-16
Emerald Advisors	-3.3%	-7.0%	16.7%	-7.0%	-9.3%	5.7%	11.4%	9.5%	11.0%	13.3%	14.4%	9.4%	Dec-04
Russell 2000 Growth	-0.8%	-4.2%	15.3%	-4.2%	-9.6%	4.6%	9.8%	10.4%	9.1%	11.4%	12.2%	8.2%	Dec-04
T- Fisher Asset Management	2.9%	-1.7%	14.2%	-1.7%	-7.9%	2.3%	8.9%	10.2%	8.9%	11.1%	11.5%	8.9%	May-08
Russell 2000 Value	5.1%	-0.6%	12.8%	-0.6%	-8.2%	0.2%	6.5%	9.5%	7.2%	9.4%	10.1%	7.3%	May-08
Fiera Capital	-2.0%	-5.3%	18.2%	-5.3%	-4.0%	8.0%	10.9%	9.6%	7.2%	11.7%		13.4%	Dec-09
Russell 2500 Growth	-1.9%	-3.2%	20.0%	-3.2%	-4.1%	8.7%	12.3%	12.0%	10.2%	12.8%	13.5%	13.2%	Dec-09
Ariel	3.6%	-2.5%	15.2%	-2.5%	-6.2%	3.6%	7.0%					9.5%	Jan-16
Russell 2500 Value	4.6%	0.1%	15.4%	0.1%	-4.4%	2.7%	6.9%	9.5%	7.0%	10.1%	11.0%	11.5%	Jan-16
Non-U.S. Equity Developed Composite	2.8%	-0.6%	13.3%	-0.6%	-1.9%	0.1%	6.2%	6.0%	2.6%	4.8%	4.8%	5.4%	Jan-89
Non-U.S. Equity Developed Custom Benchmark	2.8%	-0.8%	13.2%	-0.8%	-2.0%	0.4%	6.4%	6.8%	3.5%	6.2%	5.2%		Jan-89
Causeway Capital Management	4.1%	-2.7%	7.9%	-2.7%	-7.9%	-3.4%	4.5%	4.0%	1.3%	5.2%		6.7%	Nov-11
MSCI EAFE	2.9%	-1.1%	12.8%	-1.1%	-1.3%	0.7%	6.5%	6.5%	3.3%	6.1%	4.9%	6.6%	Nov-11
Northern Trust MSCI EAFE+Canada	2.7%	-0.5%	14.5%	-0.5%	0.2%	1.6%	7.0%	7.1%	3.5%	6.1%	5.4%	2.9%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	2.7%	-0.5%	14.6%	-0.5%	0.3%	1.7%	7.2%	7.4%	3.8%	6.8%	5.6%	2.6%	Mar-07

### Annualized Performance (Net of Fees)

Market Value: \$5,382.5 Million and 100.0% of Fund

#### Ending September 30, 2019

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Northern Trust International Small Cap	3.1%	-0.4%	12.3%	-0.4%	-5.6%							-6.1%	Mar-18
Northern Trust EAFE Small Cap Custom Benchmark	3.1%	-0.1%	12.7%	-0.1%	-5.3%							-5.5%	Mar-18
Strategic Global Advisors	2.6%	-2.1%	9.6%	-2.1%	-8.0%							-6.2%	Nov-17
MSCI World ex USA Small Cap	2.6%	-0.3%	12.6%	-0.3%	-5.6%	-1.2%	5.5%	7.5%	5.1%	7.5%	6.9%	-2.8%	Nov-17
Mackenzie Investments	1.4%	1.8%	11.5%	1.8%	-6.3%							-4.0%	Nov-17
MSCI EAFE Small Cap	2.8%	-0.4%	12.1%	-0.4%	-5.9%	-1.2%	5.9%	7.5%	6.0%	8.6%	7.5%	-3.1%	Nov-17
Non-U.S. Equity Emerging Composite	2.0%	-4.3%	5.5%	-4.3%	-2.2%	-1.6%	6.0%	8.7%	2.6%	1.5%	2.5%	8.1%	Jan-09
MSCI Emerging Markets	1.9%	-4.2%	5.9%	-4.2%	-2.0%	-1.4%	6.0%	8.6%	2.3%	2.4%	3.4%	8.8%	Jan-09
Rhumbline Emerging Markets Index	2.0%	-4.3%	5.5%	-4.3%	-2.2%	-1.6%	6.0%	8.8%	2.7%			1.5%	Feb-13
MSCI Emerging Markets	1.9%	-4.2%	5.9%	-4.2%	-2.0%	-1.4%	6.0%	8.6%	2.3%	2.4%	3.4%	1.5%	Feb-13

Investment Manager

### Annualized Performance (Net of Fees)

Market Value: \$5,382.5 Million and 100.0% of Fund

#### Ending September 30, 2019

Absolute Return	1 Mo 3.5% -0.4% 3.7% 1.1% 0.0% 0.0% 1.0% 0.5%	3 Mo -1.6% -0.9% -1.6% 1.7% -1.4% -1.6%	YTD 4.4% 5.2% 5.3% 4.3% -7.8% 3.1%	Fiscal YTD -1.6% -0.9% -1.6% 1.7%	1 Yr -12.5% 0.0% -11.8% -2.5%	2 Yrs -4.4% 1.5% -3.7%	3 Yrs 1.2% 3.2% 5.1%	4 Yrs 0.5% 2.5% 5.7%	5 Yrs -0.2% 1.9%	7 Yrs 1.9% 3.2%	10 Yrs <b>2.2%</b> 2.7%	Inception 2.2% 2.4%	Inception Date Sep-05 Sep-05
HFRI Fund of Funds Composite Index Elizabeth Park Capital Management HFRX Event Driven Index T - Archview Offshore Fund. LTD HFRI ED: Distressed/Restructuring Index Real Assets Composite	-0.4% 3.7% 1.1% 0.0% 0.0% <b>1.0%</b>	-0.9% -1.6% 1.7% -1.4% -1.6%	5.2% 5.3% 4.3% -7.8%	-0.9% -1.6% 1.7%	0.0%	1.5% -3.7%	3.2%	2.5%	1.9%				-
Index Elizabeth Park Capital Management HFRX Event Driven Index T - Archview Offshore Fund. LTD HFRI ED: Distressed/Restructuring Index Real Assets Composite	3.7% 1.1% 0.0% 0.0% <b>1.0%</b>	-1.6% 1.7% -1.4% -1.6%	5.3% 4.3% -7.8%	-1.6% 1.7%	-11.8%	-3.7%				3.2%	2.7%	2.4%	Sep-05
Management HFRX Event Driven Index T - Archview Offshore Fund. LTD HFRI ED: Distressed/Restructuring Index Real Assets Composite	1.1% 0.0% 0.0% <b>1.0%</b>	1.7% -1.4% -1.6%	4.3% -7.8%	1.7%			5.1%	5.7%	0 40/				
T - Archview Offshore Fund. LTD HFRI ED: Distressed/Restructuring Index Real Assets Composite	0.0% 0.0% <b>1.0%</b>	-1.4% -1.6%	-7.8%		-2.5%	4 40/		0.170	6.4%			5.6%	May-14
HFRI ED: Distressed/Restructuring Index Real Assets Composite	0.0%	-1.6%		-1.4%		-4.1%	0.5%	2.0%	-0.8%	1.6%	1.5%	-1.0%	May-14
Distressed/Restructuring Index Real Assets Composite	1.0%		3.1%		-22.1%	-9.9%	-5.2%	-4.0%	-4.1%			-3.3%	Mar-14
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Real Assets Benchmark	0.5%	1.8%	7.1%	1.8%	6.6%	5.7%	5.7%	7.1%	2.3%			6.3%	Dec-12
Hour Hoode Denominanta		1.6%	8.8%	1.6%	8.3%	6.3%	5.4%	6.0%	-0.9%			3.0%	Dec-12
Real Assets - Public Real Estate Composite	1.8%	7.8%	28.5%	7.8%	20.9%	12.3%	9.0%	11.9%	11.0%			10.3%	Jan-13
FTSE NAREIT All Equity REIT Custom Benchmark	1.8%	1.5%	21.0%	1.5%	13.8%	9.1%	6.9%	10.2%	9.8%				Jan-13
Rhumbline FTSE NAREIT	1.8%	7.8%	28.5%	7.8%	20.9%	12.3%	9.0%	11.9%	11.0%			8.9%	May-13
FTSE NAREIT All Equity REIT Custom Benchmark	1.8%	1.5%	21.0%	1.5%	13.8%	9.1%	6.9%	10.2%	9.8%			7.9%	May-13
Real Assets - Open-End Real Estate Composite	0.9%	0.9%	-1.0%	0.9%	0.6%	3.8%						4.2%	Jan-17
NFI	0.4%	1.1%	3.1%	1.1%	4.6%	6.2%	6.3%	7.0%	8.4%	9.3%	9.8%	6.2%	Jan-17
UBS Trumbull Fund	0.7%	0.7%	-2.7%	0.7%	-1.1%	2.7%						3.3%	Jan-17
NFI	0.4%	1.1%	3.1%	1.1%	4.6%	6.2%	6.3%	7.0%	8.4%	9.3%	9.8%	6.2%	Jan-17
Clarion Lion Properties Fund	1.4%	1.4%	4.4%	1.4%	6.3%							8.1%	Feb-18
NFI	0.4%	1.1%	3.1%	1.1%	4.6%	6.2%	6.3%	7.0%	8.4%	9.3%	9.8%	5.9%	Feb-18
Real Assets - Infrastructure Composite	1.3%	2.8%	24.4%	2.8%	17.3%	7.8%						9.3%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	1.1%	2.5%	23.8%	2.5%	16.5%	7.1%	7.8%	9.6%	5.2%	8.4%	10.9%	8.6%	Mar-17
Rhumbline Infrastructure Index	1.2%	2.7%	24.3%	2.7%	17.2%	7.8%						9.3%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	1.1%	2.5%	23.8%	2.5%	16.5%	7.1%	7.8%	9.6%	5.2%	8.4%	10.9%	8.6%	Mar-17
Rreef Global Infrastructure	1.5%	3.1%	25.3%	3.1%	18.1%							14.7%	Mar-18
Dow Jones Brookfield Global Infrastructure Index	1.1%	2.5%	23.8%	2.5%	16.5%	7.1%	7.8%	9.6%	5.2%	8.4%	10.9%	13.2%	Mar-18

### Annualized Performance (Net of Fees)

Market Value: \$5,382.5 Million and 100.0% of Fund

#### Ending September 30, 2019

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Real Assets - Private Real Estate Composite	0.0%	0.0%	3.3%	0.0%	4.7%	6.2%	6.3%	7.4%	7.7%	9.8%	8.4%	4.0%	May-06
Real Assets - Private Real Estate Benchmark	0.0%	0.0%	3.3%	0.0%	4.7%	6.2%	6.3%	7.4%	7.7%	9.8%			May-06
Real Assets - Private Energy/Infrastructure Composite	0.0%	0.0%	9.6%	0.0%	17.2%	25.4%	19.4%	9.3%	-2.7%	9.3%		8.4%	May-12
Real Assets - Private Energy/Infrastructure Benchmark	0.0%	0.0%	9.6%	0.0%	17.2%	25.4%	19.4%	9.3%	-2.7%	9.3%		8.4%	May-12
Private Assets Composite	0.0%	0.0%	5.8%	0.0%	7.5%	14.7%	12.5%	11.6%	11.1%	11.6%	12.8%	8.7%	Mar-87

Please note: As of January 1, 2019, the total fund policy index incorporates the adjustments as approved by the Board of Trustees to reflect the fundamental changes adopted as a result of the approved asset allocation. T represents any investment terminated by the Board of Trustees. Fisher Asset Management has been terminated by the Board of Trustees as of October 10th, 2019.